Section 3 of draft recommended practice

- Definitions
- Acronyms (from July 13, 2001)

Definitions

- **backward compatible:** The ability of one "new" system to interwork with another "old" system. In this case the different set of rules implies that the new set of rules contains new rule in addition to the old set of rules. A proper subset of compatible.
- **coexistence:** The ability of one system to perform a task in a given shared environment where other systems may or may not be using the same set of rules to perform their tasks.
- **collaborative coexistence mechanism:** A method that exchanges information between different systems to minimize mutual interference.

Definitions

- **compatible:** The ability of two different systems to interoperate where the two different systems share a common set of rules.
- **conformance:** The ability of a system to follow a single set of rules.
- **connection-oriented:** data transmission in which the information-transfer phase is preceded by a call-establishment phase and followed by a call-termination phase. (Communications Standard Dictionary 2ed. M. Weik)
- **direct sequence spread spectrum:**

Definitions

- **frequency-hopping:** It is a technique in which the instantaneous carrier frequency of a signal is periodically changed, according to a predetermined code, to other positions within a frequency spectrum that is much wider that that required for normal message transmission. (Communications Standard Dictionary 2ed. M. Weik)
  -or-
  A modulation technique used for multiple access. (IEEE Std 100-1992)

Definitions

- **interference:** In a communication system, extraneous power entering or induced in a channel from natural or man-made sources that might interfere with reception of desired signals or the disturbance caused by the undesired power. (Communications Standard Dictionary 2ed. M. Weik)
  -or-
  In a data transmission path, either extraneous power which tends to interfere with the reception of the desired signals or the disturbance of signals which results. (IEEE Std 100-1992)
- **interoperable:** The ability of two systems to perform a given task using a single set of rules.
- **interworking:** The ability of two systems to perform a task given that each system implements a different set of rules.

Definitions

- **multipath delay:**
- **multipath fading:** fading due to the propagation of an electromagnetic wave over many different paths, dissipating energy and causing distortion, particularly by signal cancellation at the destination because of differences in arrival time due to the different paths. (Communications Standard Dictionary 2ed. M. Weik)
- **non-collaborative coexistence mechanism:** A method used by one system to minimize mutual interference where no information is exchanged between the two systems (e.g. WLAN and WPAN)
- **operable:** The ability of a system to perform the functions as expected.

Definitions

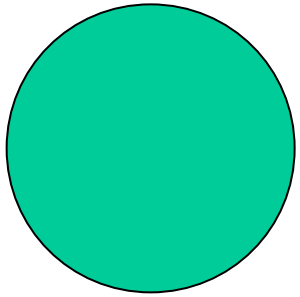
- **propagation:** The movement or transmission of a wave in a medium or in free space, usually described in terms of phase or group velocity. (Communications Standard Dictionary 2ed. M. Weik)
  -or-
  A travel of waves through or along a medium (IEEE Std 100-1992)
- **spread spectrum:** A communication technique in which the information-modulated signal is transmitted in a bandwidth that is considerably greater than the frequency content of the original information. (Communications Standard Dictionary 2ed. M. Weik)
  -or-
  A modulation technique for multiple access, or for increasing immunity to noise and interference (IEEE Std 100-1992)

Definitions

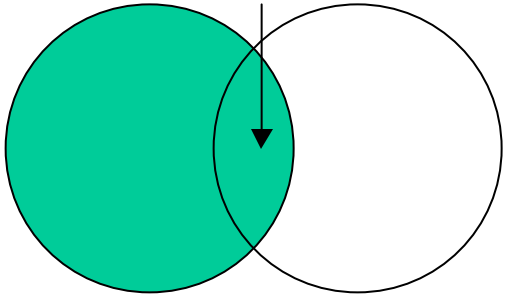
- **synchronous:** Pertaining to events that occur at the same time or at the same rate. (Communications Standard Dictionary 2ed. M. Weik)
  -or-
  A device whose speed of operation is related to the rest of the system to which the device is connected (IEEE Std 100-1992)
- **synchronous connection-oriented link (SCO):** a point-to-point link between a master and a single slave in the piconet. (IEEE Std 802.15.1-2001)

Terms (set theory)

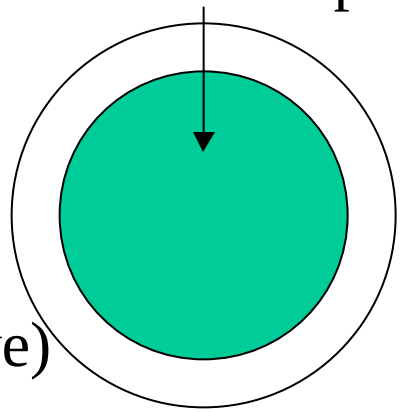
Interoperable



Compatible

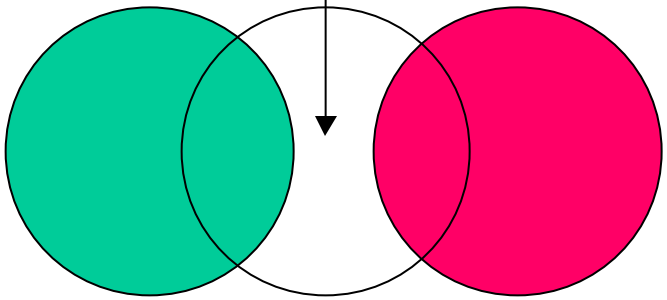


Backward Compatible

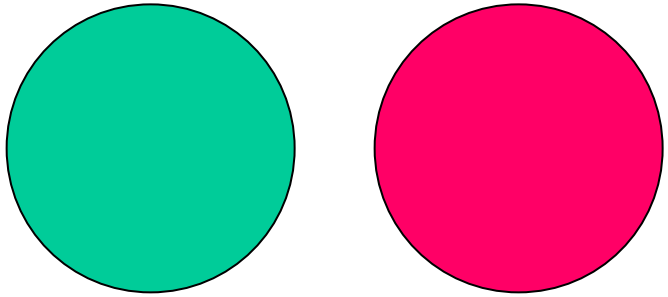


(Collaborative)

Interworking



Coexistence



(Non-collaborative)

Acronyms

- ACL asynchronous connection-less
- AFH adaptive frequency hopping
- AP access point
- ARQ automatic repeat request
- ASIC application specific integrated circuits
- AWGN additive white Gaussian noise
- BER bit error rate
- CCK complementary code keying
- CTS clear to send
- DBPSK differentiated binary phase shift keying

Acronyms

- DCF distributed coordination function
- DIFS distributed inter frame space
- DSSS direct sequence spread spectrum

Acronyms

- FCS frame check sequence
- FEC forward error correction
- FHSS frequency-hopping spread spectrum
- GFSK Gaussian frequency shift keying
- ISM industrial, scientific, and medical
- LDI limited d input and dump
- MAC medium access control
- PCF point coordination function
- PER packet error rate
- PHY physical
- QPSK quadrature phase shift keying

Acronyms

- RF radio frequency (Bluetooth)
- SCO synchronous connection-oriented (Bluetooth Baseband)
- SINR signal to interference noise ratio (s/(n+i))
- SIFS short inter frame space
- SIR signal to interfere ratio
- SNR signal to noise ratio (s/i)
- TBTT target beacon transmit time
- TDMA time division multiple access